



PROFESSIONAL IDENTITY & MEDICINES DEVELOPMENT

BY DR. MANMOHAN SINGH

The Academy is pleased to continue its series on the perception of Professional Identity in Medicines Development, featuring content from graduates of the Academy Medical Affairs course. We have selected some of the top essays prepared by students of the course. Below is an excerpt from an essay by Dr. Manmohan Singh in which he was asked to “Discuss the development and status of your own Professional Identity, and what it means in terms of your job, your career, and future prospects.” (See page 2).

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"What professional identity means to me in my job can be explained by the impact medical professionals can play in drug development or a pharmaceutical industry. As a clinician, one plays a significant role in the community and towards patient care. However, there is a limitation to a number of patients one can reach. However, a pharmaceutical physician can work with many key opinion leaders and help them learn about a new drug, a new mechanism of action, disseminate new information which can strengthen their patient care. Also, one can work with regulators and help in early approval of the drug which can again make a difference in the lives of so many patients who had to otherwise wait for several months or years before they could access the drug. A clinician in me who misses seeing patients get answered by the broader role and bigger impact one can play towards patient care.

I work in the field of oncology. The role drug development has played in cancer care is enormous.

To give an example, lung cancer-specific survival has improved from 26% among men with NSCLC that was diagnosed in 2001 to 35% among those in whom it was diagnosed in 2014 which is attributed to targeted therapy.¹ To realize what it would mean to patients, who can now live longer is a great component of my professional identity.

Finally, my learnings in IFAPP Academy allowed me to learn from veterans and interact with fellow students. Various concepts learnt have further contributed to the development of professional identity which I believe is a continuous process."

- Dr. Manmohan Singh



Dr. Manmohan Singh is a Senior Medical Director and Regional Oncology Medical Lead supporting Pfizer Emerging Asia. He completed his graduation in medicine (MBBS) and MD in pharmacology from Pune University, India. He also received his master's in pharmaceutical science from Hibernia College in Dublin, Ireland. He recently completed the Certified Medicines Development course (CMD) through IFAPP Academy.

Thank you, Dr. Singh, for sharing your unique perspective with the Academy and its readers. sharing your insights with the Academy and its readers! To read the essay in its entirety, [please click here](#).

EXPLORING VACCINATION POLICIES IN LATIN AMERICA

Latin America is a densely populated area of the world made up of some countries with stable political situations and others with significant political discord and economic challenges. As such, we draw your attention to a publication by Marino J González, a professor at the Simon Bolivar University in Venezuela in which the author aimed to “Describe the characteristics of the success and failure of Covid-19 vaccination policies in Latin America.”

Figure 1 allows readers to appreciate the successes and failures of vaccine campaigns in Latin American countries.

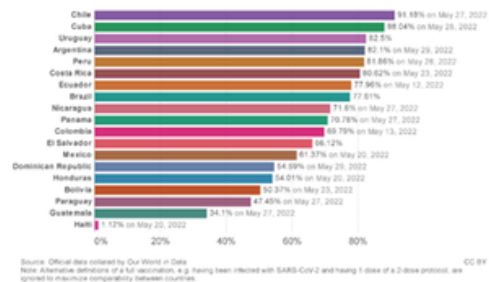


Figure 1. Latin America: percentage of the population fully vaccinated against COVID-19 (initial protocol) May 30th, 2022. Source: (1).

“...The number of days required for countries to reach 50 % full coverage after the start of vaccinations; three countries (Uruguay, Cuba, and Chile) took less than 200 days, while four countries (Costa Rica, Mexico, Honduras, and Bolivia) took more than 300 days. This gap illustrates the differences in performance among countries in the region. Countries that required fewer days can be considered more successful.”² Continue reading [here](#).

UN: GLOBAL POPULATION TO REACH 8 BILLION PEOPLE



Eight billion people on our planet! This is what the UN forecasts based on the rhythm of growth of the last few decades. In an era characterized by wars, food shortages and climate change, this news may not be welcome to all. However, the UN emphasizes that the population increase is due in part to improved health standards and a steep decline in child mortality.

The global population will hit 8 billion people on November 15, 2022, moving to 8.5 billion people in 2030 and up to 10.4 billion by the end of the 21st century. Growth dynamics will differ among continents: the Far East and Southeast Asia will remain the most populous on the planet, but the greatest growth will take place in Africa (Congo, Egypt, Ethiopia, Nigeria). In the year 2023, India will overtake China to become the most populous country, with more than 1.4 billion people. Continue reading [here](#).

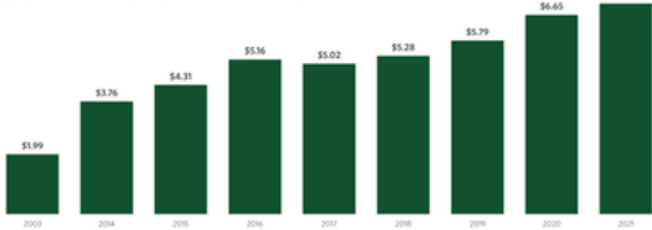
A RAPIDLY EVOLVING PHARMACEUTICAL MARKET

The global pharmaceutical market is often considered a stable one, with minor changes occurring over the years. However, this paradigm is rapidly changing: the arrival of new successful biotech companies, the prevalence of expensive and efficacious drugs in oncology, the emerging role of orphan drugs, and finally the Covid-19 pandemic have produced significant changes.

In the two illustrations below, you can appreciate the significant changes which occurred in the last twenty years.

Pharma sector valuations peaked in February 2021 and have been down in recent months. Despite this, the total value of the sector has gone up by \$300 billion since September 2020. This is due, in part, to high volume of IPOs.

Aggregate value of the global pharmaceutical industry 2003 to 2021 (\$trillions)



Source: Torrey analysis of data from Bloomberg, CapitalIQ and private companies. Aggregate value for 2021 is based on private and public values as of Nov 5, 2021.

The pharmaceutical sector saw big pharma keep its value share, the biotech and China sectors grow. The branded pharma sector shrunk slightly, and the branded generics sector lost almost half of its value share. The drop in branded generics value share reflects ongoing industry commoditization and turbulence in pricing in Europe, Latin America, Africa and parts of Asia.



Source: Torrey analysis, November 5, 2021. "Big pharma" is classified as the 10 largest companies in the sector by value. The biotech sector seems smaller than some might have expected. This is because we classify a company with no approved product as a "biotech company" and a company with a marketed product that is not a big pharma, not a Japan pharma nor a China branded generic pharma as a branded pharma company. Thus, many companies (like Astra or Biogen) that some might think of as biotech are classified by us as branded pharma.

TORREYA



A CLOSER LOOK AT THE NUMBER OF SARS-COV-2 INFECTIONS

Counts of reported cases have been the key metric to monitoring the COVID-19 pandemic. However, since the beginning, it has been clear that reported cases represent only a fraction of all SARS-CoV-2 infections. Despite reported cases acting as the key metric for understanding the far-reaching implications of the COVID-19 pandemic, it has always been clear that these represent merely a portion of all SARS-CoV-2 infections. We have included a short article from the Lancet, which used a new approach to examine combined data from reported cases, deaths, excess deaths attributable to COVID-19, hospitalizations, and seroprevalence surveys.

[Click here to read the complete article.](#)

PANDEMIC VACCINES IN 100 DAYS: IS IT POSSIBLE?

We all were amazed by the fast development of the Covid-19 vaccines. A race began in January 2020 with the availability of the viral sequence. The first winners of this race were declared in December 2020 when the first vaccines were granted an emergency use marketing authorization.

The authors of a paper published on the New England Journal of Medicine state that “The development of SARS-CoV-2 vaccines in less than 1 year was a scientific triumph. Yet, during the 326 days between the viral sequence becoming available in January 2020 and emergency authorization of the first vaccines by a stringent regulatory authority, more than 70 million Covid-19 cases and 1.6 million resulting deaths were recorded worldwide.”³

As there are probably more pandemics in our future, there is a new challenge facing all of us as Medical Affairs professionals- the development of new vaccines in just 100 days. Will this ever be possible?



[Click here to read the full article.](#)

REFERENCES

1. Howlader N, Forjaz G, Mooradian M J, et. al. The Effect of Advances in Lung-Cancer Treatment on Population Mortality. *N Engl J Med* 2020; 383:640-649DOI: 10.1056/NEJMoa1916623
2. González R, M. J. (2022). Policy successes and policy failures in COVID-19 vaccinations in Latin American countries. *Gaceta Médica de Caracas*, 130(Supl. 2). <https://doi.org/10.47307/gmc.2022.130.s2.6>
3. Saville, M., Cramer, J. P., Downham, M., Hacker, A., Lurie, N., van der Veken, L., Whelan, M., & Hatchett, R. (2022). Delivering Pandemic Vaccines in 100 Days — What Will It Take? *New England Journal of Medicine*, 387(2), e3. <https://doi.org/10.1056/nejmp2202669>

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